

REMARKS

Claims 1 – 17 were previously pending in this application. By this amendment, claims 1 – 3 and 9 are amended. No claims are canceled and no new claims are added. As a result, claims 1 – 17 remain pending in this application, with claims 1 and 9 being independent claims. No new matter has been added. Support for the amendments is found, for example, at paragraphs 9, 24, 27, 30, and 31 of the Application as filed.

Rejections Under 35 U.S.C. §102

The Office Action rejected claims 1 – 5 and 9 – 14 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,441,558 to Muthu et al. (hereinafter “Muthu ‘558”). Applicants respectfully disagree with this rejection for at least the reasons described below.

Claim 1 recites in part “wherein the one of more white light-emitting elements are configured to generate the white light independent of each of the light of the first colour generated by the one or more first colour light-emitting elements and the light of the second colour generated by the one or more second light-emitting elements.”

Applicants respectfully assert that Muthu ‘558 does not disclose this claim element. In the Office Action, the Examiner asserts that light mixing element 26 of Muthu ‘558 discloses “the one or more white light-emitting elements,” “one or more first colour light-emitting elements” and “one or more second colour light-emitting elements” as recited in claim 1. (Office Action, pages 2 – 3.) In particular, the Examiner cites identifiers 22, 24, and 28 of Muthu ‘558 as allegedly disclosing “one of more white light-emitting elements.” (Office Action, page 3.) Applicants respectfully disagree.

In Muthu ‘558, identifier 22 is a green LED light source, identifier 24 is a red LED light source, and identifier 28 is a blue LED light source, all of which are included in the light mixer 26. (Column 2, lines 61 – 63 and Figure 1.) None of green LED source 22, red LED source 24, and blue LED source 28 disclose “one or more white light-emitting elements” as recited in claim 1. The colour LEDs of Muthu ‘558 are not white light-emitting elements. As Muthu ‘558 states, “white light is produced in accordance with one embodiment of the present invention, when the light outputs from Red, Green, and Blue LED light source arrays are mixed in proper combination.” (Column 4, lines 16 – 19.) Thus, Murtha ‘558 describes white light produced by mixing coloured light sources. Claim 1 recites “an optical system configured to extract and mix

the light generated by the light module thereby creating an output beam of a second white light having the desired correlated colour temperature.” Claim 1 also recites that the light module includes “one of more white light-emitting elements... configured to generate a first white light” and to do so “independent of each of the light of the first colour generated by the one or more first colour light-emitting elements and the light of the second colour generated by the one or more second light-emitting elements.” Muthu ‘558 mixes red, green, and blue sourced light to produce white light. None of Green LED source 22, Red LED source 24, or Blue LED source 28 of Muthu ‘558 disclose “one of more white light-emitting elements” as recited in claim 1 because red, green, and blue LEDs are not white light-emitting elements.

Accordingly, Muthu ‘558 does not anticipate claim 1 or claims 2 – 5 that depend there from. For at least the above reasons, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1 – 5 under 35 U.S.C. §102(b) as being anticipated by Muthu ‘558.

Independent claim 9 recites in part “generating, from one or more white light-emitting elements, a first white light independent of each of the first coloured light and the second coloured light.” As pointed out above, Muthu ‘558 combines light from colour light sources to produce white light, and does not generate white light independent of the light generated by each of the colour light-emitting elements. Accordingly, Muthu ‘558 does not disclose “generating, from one or more white light-emitting elements, a first white light independent of each of the first coloured light and the second coloured light” as recited in claim 9. For at least these reasons, Muthu ‘558 does not anticipate independent claim 9 or claims 10 – 14 that depend there from, and Applicants respectfully request reconsideration and withdrawal of the rejection of claims 9 – 14 under 35 U.S.C. §102(b) as being anticipated by Muthu ‘558.

Rejections Under 35 U.S.C. §103

The Office Action rejected claims 6 and 15 under 35 U.S.C. §103(a) as being unpatentable over Muthu ‘558 in view of U.S. Patent No. 6,507,159 to Muthu et al. (hereinafter “Muthu ‘159”). Applicants respectfully disagree with this rejection.

Muthu ‘159 does not cure the infirmities of Muthu ‘558. The white LED luminary system of Muthu ‘159 is colour (RGB) based. (Column 2, lines 65 – 66.) As stated in Muthu ‘159, “[t]he white LED luminary comprises of Red, Green, and Blue (RGB) LED light sources.”

(Column 3, lines 4 – 5.) Like Muthu ‘558, the RGB luminary control of Muthu ‘159 controls light from coloured light sources and does not “generate the first white light independent of each of the light of the first colour generated by the one or more first colour light-emitting elements and the light of the second colour generated by the one or more second light-emitting elements” as recited in claim 1, and does not disclose or suggest “generating, from one or more white light-emitting elements, a first white light independent of each of the first coloured light and the second coloured light” as recited in claim 9.

With reference to the above discussion, claim 6 depends from allowable independent claim 1, and claim 15 depends from allowable independent claim 9. Accordingly, each of claims 6 and 15 are patentable for at least the same reasons as the independent claim from which they depend, respectively, and reconsideration and withdrawal of the rejection of claims 6 and 15 under 35 U.S.C. §103(a) is respectfully requested.

The Office Action rejected claims 7, 8, 16, and 17 under 35 U.S.C. §103(a) as being unpatentable over Muthu ‘558 in view of U.S. Patent No. 6,488,390 to Lebens et al. (hereinafter “Lebens”). Applicants respectfully disagree with this rejection because Lebens does not cure the infirmities of Muthu ‘558. Lebens discloses a colour adjusted flashlight having LEDs made from a material such as indium gallium nitride. (Abstract and column 6, lines 45 – 49.) The LEDs of Lebens are either white LEDs that yield a white appearing light output (column 9, line 49 – 52) or standard coloured LEDs of red, yellow, green, and/or blue, with each coloured LED controlled separately to provide combined white light from the coloured LED sources (column 9, lines 55 – 60). Like Muthu ‘558, Lebens does not mix any light from a white LED source with any light from a coloured LED source to create an output beam of a second white light. Accordingly, no combination of Muthu ‘558 and Lebens discloses or suggests “one or more white light-emitting elements configured to generate a first white light... first colour light-emitting elements configured to generate light of a first colour... second colour light-emitting elements configured to generate light of a second colour... and an optical system configured to extract and mix the light generated... thereby creating an output beam of a second white light” as recited in claim 1. Like Muthu ‘558, Lebens also does not disclose or suggest generating a first coloured light from one or more first colour light-emitting elements... generating a second coloured light from one or more second colour light-emitting elements; generating, from one or more white light-emitting elements, a first white light independent of each of the first coloured

light and the second coloured light; and mixing the first coloured light, the second coloured light, and the first white light to generate a mixed white light” as recited in claim 9.

With reference to the above discussion, claims 7 and 8 depend from allowable independent claim 1, and claims 16 and 17 depend from allowable independent claim 9. Accordingly, each of claims 7, 8, 16, and 17 are patentable for at least the same reasons as the independent claim from which they depend, respectively, and reconsideration and withdrawal of the rejection of claims 7, 8, 16, and 17 under 35 U.S.C. §103(a) is respectfully requested.

General Comments on Dependent Claims

Since each of the rejected dependent claims depends from a base claim that is believed to be in condition for allowance, Applicants believe that it is unnecessary at this time to argue the allowability of each of the dependent claims individually. However, Applicants do not necessarily concur with the interpretation of the rejected dependent claims as set forth in the Office Action, nor do Applicants concur that the basis for the rejection of any of the dependent claims is proper. Therefore, Applicants reserve the right to specifically address the patentability of the dependent claims in the future, if deemed necessary.

CONCLUSION

It is respectfully believed that all of the rejections, objections, or comments set forth in the Office Action have been addressed. However, the absence of a reply to a specific rejection, objection, or comment set forth in the Office Action does not signify agreement with or concession of that rejection, objection, or comment. In addition, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Furthermore, nothing in this paper should be construed as intent to concede any issue with regard to any claim.

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' representative, Mark L. Beloborodov, Esq. at (781) 418-9363, to discuss any outstanding issues relating to the allowability of the application.

Respectfully submitted,
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